

USGS-NPS Vegetation Mapping Program
Effigy Mounds National Monument

***Nelumbo lutea* Herbaceous Vegetation**

COMMON NAME	American Lotus Herbaceous Vegetation
SYNONYM	American Lotus Aquatic Wetland
PHYSIOGNOMIC CLASS	Herbaceous Vegetation (V)
PHYSIOGNOMIC SUBCLASS	Hydromorphic rooted vegetation (V.C)
PHYSIOGNOMIC GROUP	Temperate or subpolar hydromorphic rooted vegetation (V.C.2)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural Temperate or subpolar hydromorphic-rooted vegetation (V.C.2.N)
FORMATION	Permanently flooded temperate or subpolar hydromorphic rooted vegetation (V.C.2.N.a)
ALLIANCE	NELUMBO LUTEA PERMANENTLY FLOODED TEMPERATE HERBACEOUS ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 1

USFWS WETLAND SYSTEM Permanently flooded temperate or subpolar hydromorphic rooted vegetation

CONCEPT SUMMARY

Globally

The American lotus type occurs in natural wetlands or artificial impoundments across the eastern United States and southern Ontario. Stands are essentially monospecific *Nelumbo lutea* communities. This association may be divided as more information becomes available. In Wisconsin, this type is located primarily in the backwaters and impoundments of the Mississippi River and along the deep marshes of the lower Wolf River system. In the Central Appalachians this association includes mixed or monospecific *Nelumbo lutea* communities of natural wetlands or artificial impoundments, sometimes with scattered *Cephalanthus occidentalis*. Other floating-leaved aquatic plant species, such as *Nuphar lutea* and *Nymphaea odorata*, may be present, as may emergent species such as *Schoenoplectus tabernaemontani* (= *Scirpus tabernaemontani*), *Pontederia cordata*, *Juncus effusus*, *Typha latifolia*, *Eichhornia crassipes* (alien), *Hydrocotyle* spp., and floating aquatics, such as *Salvinia minima*, *Spirodela* spp., *Lemna* spp., and *Azolla caroliniana*. The hydrology of this association is highly variable; the hydrologic placement is debatable.

RANGE

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This community occurs in backwaters of the Mississippi River near Sny Magill.

Globally

This type is found locally across many parts of the eastern/southeastern United States, from Kentucky and Virginia northeast to Ontario and Wisconsin, south to Texas, and east to Georgia.

ENVIRONMENTAL DESCRIPTION

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This type occurs in shallow water of ponds and backwaters. The substrate is muck and the water depth is < 1 meter.

Globally

Stands are found in natural wetlands or artificial impoundments. In Wisconsin, this type is located primarily in the backwaters and impoundments of the Mississippi River and along the deep marshes of the lower Wolf River system (E. Epstein pers. comm. 2003). The hydrology of this association in the Central Appalachian region is highly variable; thus, the hydrologic placement is debatable (Central Appalachian Ecoregional Planning Team pers. comm. 1998).

MOST ABUNDANT SPECIES

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<u>Stratum</u>	<u>Species</u>
FORB	<i>Nelumbo lutea</i>

Globally

<u>Stratum</u>	<u>Species</u>
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CHARACTERISTIC SPECIES

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Nelumbo lutea

Globally

VEGETATION DESCRIPTION

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Nelumbo lutea creates a canopy on the surface of the water. *Lemna* spp. (*trisolca*, *minor*) occurs in openings between the *Nelumbo* leaves.

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Globally

Stands are essentially monospecific *Nelumbo lutea* communities. This association may be divided as more information becomes available. In the Central Appalachian region, mixed or monospecific *Nelumbo lutea* communities of natural wetlands or artificial impoundments sometimes contain scattered *Cephalanthus occidentalis*. Other floating-leaved aquatic plant species, such as *Nuphar lutea* and *Nymphaea odorata*, may be present, as may emergent species such as *Schoenoplectus tabernaemontani* (= *Scirpus tabernaemontani*), *Pontederia cordata*, *Juncus effusus*, *Typha latifolia*, *Eichhornia crassipes* (alien), *Hydrocotyle* spp., and floating aquatics, such as *Salvinia minima*, *Spirodela* spp., *Lemna* spp., and *Azolla caroliniana* (Central Appalachian Ecoregional Planning Team pers. comm. 1998).

OTHER NOTEWORTHY SPECIES

CONSERVATION RANK G4?. Although natural stands may be relatively rare, this type may also occur in cultural impoundments. The dominant species in stands of this vegetation is widespread across the eastern United States and adjacent Canada. This is not a rare or imperiled vegetation type, even though its occurrence is poorly documented. Stands may occur in natural lakes and ponds or in artificial impoundments.

DATABASE CODE CEGLO04323

COMMENTS

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Globally

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